

1. An inspection system comprising:

a source for emitting a light beam;

a sensor for capturing images of a target area; and

an optical system for splitting the light beam into a plurality of paths for illuminating the target area, the optical system arranged such that a 2D image and a 3D image of the target area have the same optical path length from the target area to the sensor.

2. The inspection system of claim 1, wherein the source is a laser line generator.

3. The inspection system of claim 1, wherein the sensor is an addressable camera.

4. The inspection system of claim 1, wherein the target area is a point.

5. The inspection system of claim 1, wherein the optical system comprises first and second mirrors arranged so that the light beam impinges on the first and second mirrors and is reflected onto the target from the first mirror in one direction and from the second mirror in another direction.

6. The inspection system of claim 1, wherein the first and second mirrors are adjustable horizontally, vertically, and angularly.

7. An inspection system comprising:

a source for emitting a light beam;  
a sensor for capturing images of a target; and  
an optical system for splitting the light beam into a plurality of paths for illuminating the target, the optical system arranged such that a 2D image and a 3D image of the target appear in a same focal plane for capture by the sensor.

8. The inspection system of claim 7, wherein the source is a laser line generator.
9. The inspection system of claim 7, wherein the sensor is an addressable camera.
10. The inspection system of claim 7, wherein the target area is a point.
11. The inspection system of claim 7, wherein the optical system comprises first and second mirrors arranged so that the light beam impinges on the first and second mirrors and is reflected onto the target from the first mirror in one direction and from the second mirror in another direction.
12. The inspection system of claim 7, wherein the first and second mirrors are adjustable horizontally, vertically, and angularly.
13. A method of inspection comprising:  
splitting a light beam into a plurality of paths;

utilizing the plurality of paths to illuminating a target so that a 2D image and a 3D image of the target appear in the same focal plane; and

capturing the 2D and 3D images with a sensor.